

BUTT WELDING APPARATUS AND BUTT WELDING METHOD

ABSTRACT

~~The present invention is a~~ butt welding apparatus and a butt welding method where end faces of at least one plate member to be welded are butted to each other to form a butt portion, and butt welding can be performed on respective plate members to be welded which have various thickness sizes on both side portions of the butt portion with electric resistance heat by a pair of two electrode members which are ~~made common to the respective plate members and are supplied with power.~~ At least one electrode member (1) of a pair of electrode members (1, 2) ~~for butt welding two plate members (31, 32)~~ is provided on an outer face thereof with a ~~retreating shaped~~ convex portion (1A) which gradually retreats from one plate member (31) of ~~the two plate members (31, 32)~~ according to ~~extension~~ as it extends from an intermediate portion, in a thickness direction, of the one electrode member (1) along the one plate member (31). Butt welding of the two plate members (31, 32) is performed ~~in a state that~~ by the position of the butting portion (71) of these plate members (31, 32) ~~has been being~~ offset from the intermediate portions, in the thickness directions, of the electrode members (1, 2) to the ~~retreating shaped~~ convex portion (1A) by an amount (L1) corresponding to a difference in thickness between the plate members (31, 32), and butt welding of two other plate members having different thickness sizes is performed with a changed offset amount